

(19) United States

(12) Patent Application Publication (10) Pub. No.: US 2017/0102884 A1 Kim et al.

Apr. 13, 2017 (43) **Pub. Date:**

(54) MEMORY SCHEDULING METHOD AND METHOD OF OPERATING MEMORY **SYSTEM**

(71) Applicant: Samsung Electronics Co., Ltd., Suwon-si (KR)

(72) Inventors: **Byung-gook Kim**, Hwaseong-si (KR); Young-bong Kim, Seoul (KR);

Seung-hwan Ha, Seoul (KR); Sang-hoon Yoo, Suwon-si (KR)

(73) Assignee: Samsung Electronics Co., Ltd.,

Suwon-si (KR)

(21) Appl. No.: 15/222,209

(22)Filed: Jul. 28, 2016

Foreign Application Priority Data (30)

Oct. 8, 2015 (KR) 10-2015-0141692

Publication Classification

(51) Int. Cl. G06F 3/06 (2006.01)

U.S. Cl.

CPC G06F 3/0608 (2013.01); G06F 3/0613 (2013.01); G06F 3/0652 (2013.01); G06F 3/0659 (2013.01); G06F 3/0679 (2013.01)

(57)**ABSTRACT**

Disclosed is a method of operating a memory system which executes a plurality of commands including a write command and a trim command. The memory system includes a memory device, which includes a plurality of blocks. The method further includes performing garbage collection for generating a free block, calculating a workload level in performing the garbage collection, and changing a command schedule based on the workload level.

10

